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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,264	01/14/2004	Toshikazu Hirota	789_070 CON2	4900

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EXAMINER	
FORMAN, BETTY J	
ART UNIT	**PAPER NUMBER**
1634	

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/757,264	HIROTA ET AL.	
	Examiner	Art Unit	
	BJ Forman	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-13 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 14 January 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/868,832.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Applicant's claim for the benefit of prior-filed applications under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

The preliminary amendments to the specification filed 14 January 2004 have been thoroughly reviewed and entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 3, 4, 7, 8, 11, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Audeh et al (U.S. Patent Application Publication No. 2002/0015958 A1, filed 4 May 2000).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding Claim 3, Audeh et al disclose a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with a specimen (i.e. hybridize) and provide information about a structure within the specimen (¶ 37) and wherein said plurality of said spots are formed in which the concentration of the capture material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity (¶ 30 and 31 and Claim 33). Audeh et al do not teach the spots are supplied onto the base plate by means of an ink jet system. However, the courts have stated patentability is based on the product, not the process by which it is made. Therefore, the claimed biochip is unpatentable in view of the teaching of Audeh et al.

> "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) see MPEP 2113.

Regarding Claim 4, Audeh et al disclose the biochip wherein the spots are formed from the same capture solution i.e. formed from the same colloidal suspension in water (¶ 34). While the spots comprise different oligonucleotides and therefore do not consist of the same capture solutions, they are formed from the same solution as claimed.

Regarding Claims 7 and 8, Audeh et al disclose the biochip of Claims 3 and 4. While they do not teach the biochip spots are formed using an ink-jet system in which a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein a force of the discharge is controlled electronically, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because

Audeh et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claims 11 and 12, Audeh et al disclose the biochip of Claims 3 and 4. While they do not teach the biochip spots are formed using an ink-jet system in which a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein the number of times of discharge at each spot is controlled electronically, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Audeh et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claim 13, Audeh et al disclose a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with a specimen (i.e. hybridize) and provide information about a structure within the specimen (¶ 37) and wherein said plurality of said spots are formed in which the concentration of the capture material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity (¶ 30 and 31 and Claim 33) wherein the base plate is glass (¶ 36).

4. Claims 3, 4, 7, 8, 11, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Mirzabekov et al (U.S. Patent No. 6,458,584 B1, filed 3 March 1999).

Regarding Claim 3, Mirzabekov et al disclose a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with

a specimen (i.e. hybridize) and provide information about a structure within the specimen (Column 9, lines 20-30) and wherein said plurality of said spots are formed in which the concentration of the capture material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity Column 18, lines 49-67) wherein the spots are supplied onto the base plate by means of an ink jet system i.e. peltier thermostated pin (Column 11, lines 45-48).

Regarding Claim 4, Mirzabekov et al disclose the biochip wherein the spots are formed from the same capture solution i.e. formed from the same oligonucleotide synthesis solution (Column 11, lines 15-31 and Column 12, lines 8-10). While the spots comprise different oligonucleotides and therefore do not consist of the same capture solutions, they are formed from the same solution as claimed.

Regarding Claims 7 and 8, Mirzabekov et al disclose the biochip of Claims 3 and 4 wherein the biochip spots are supplied using an ink-jet system i.e. peltier thermostated pin (Column 11, lines 45-48). They do not teach the supplying wherein a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein a force of the discharge is controlled electronically. However, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Mirzabekov et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claims 11 and 12, Mirzabekov et al disclose the biochip of Claims 3 and 4 wherein the biochip spots are supplied using an ink-jet system i.e. peltier thermostated pin (Column 11, lines 45-48). They do not teach the supplying wherein a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein a force of the discharge is controlled electronically. However, the courts have stated patentability is

based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Mirzabekov et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claim 13, Mirzabekov et al disclose a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with a specimen (i.e. hybridize) and provide information about a structure within the specimen (Column 9, lines 20-30) and wherein said plurality of said spots are formed in which the concentration of the capture material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity Column 18, lines 49-67) wherein the spots are supplied onto the base plate by means of an ink jet system i.e. peltier thermostated pin (Column 11, lines 45-48) wherein the base plate is glass (Column 6, lines 44-49 and Column 9, lines 7-10).

5. Claims 3, 4, 7, 8, 11, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chenchik et al (U.S. Patent No. 6,489,159 B1, filed 29 September 2000).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding Claim 3, Chenchik et al disclose a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with a specimen (e.g. hybridize) and provide information about a structure within the specimen

(Column 10, lines 17-24) and wherein said plurality of said spots are formed in which the concentration of the capture material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity (Column 7, lines 49-64 and Claim 7). Chenchik et al do not teach the spots are supplied onto the base plate by means of an ink jet system. However, the courts have stated patentability is based on the product, not the process by which it is made. Therefore, the claimed biochip is unpatentable in view of the teaching of Chenchik et al.

Regarding Claim 4, Chenchik et al disclose the biochip wherein the spots are formed from the same capture solution i.e. total mRNA solution (Column 19, line 50-Column 20, line 29). While the spots comprise different oligonucleotides and therefore do not consist of the same capture solutions, they are formed from the same solution as claimed.

Regarding Claims 7 and 8, Chenchik et al disclose the biochip of Claims 3 and 4. While they do not teach the biochip spots are formed using an ink-jet system in which a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein a force of the discharge is controlled electronically, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Chenchik et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claims 11 and 12, Chenchik et al disclose the biochip of Claims 3 and 4. While they do not teach the biochip spots are formed using an ink-jet system in which a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein the number of times of discharge at each spot is controlled electronically, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528,

531 (CCPA1959). Because Chenchik et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claim 13, Chenchik et al disclose a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with a specimen (e.g. hybridize) and provide information about a structure within the specimen (Column 10, lines 17-24) and wherein said plurality of said spots are formed in which the concentration of the capture material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity (Column 7, lines 49-64 and Claim 7) wherein the base plate is glass (Column 6, lines 41-50).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Audeh et al (U.S. Patent Application Publication No. 2002/0015958 A1, filed 4 May 2000) in view of Dean et al (U.S. Patent No. 5,843,662, filed 13 May 1996).

Regarding Claim 1, Audeh et al teach a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with a specimen (i.e. hybridize) and provide information about a structure within the specimen (¶ 37) and wherein said plurality of said spots are formed in which the concentration of the capture

material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity (¶ 30 and 31 and Claim 33). Audeh et al do not teach the spots have different spot sizes. However, Dean et al teach that a linear relationship exists between spot concentration and spot size i.e. increasing nucleic acid concentration produces spots of increasing size (Column 2, lines 43-67 and Fig. 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made that the spots of Audeh et al which have different concentrations would also have different spot sizes. Alternatively, it would have been obvious to one of ordinary skill in the art to apply the different spot size-to-concentration relationship taught by Dean et al (Fig. 1-5) to the Audeh et al spots and to adjust the size of the spot to thereby provide the differing spot concentrations desired by Audeh et al (¶ 30).

Additionally, Audeh et al do not teach the spots are supplied onto the base plate by means of an ink jet system. However, the courts have stated patentability is based on the product, not the process by which it is made. Therefore, the claimed biochip is unpatentable in view of the teaching of Audeh et al. and Dean et al.

Regarding Claim 2, Audeh et al disclose the biochip wherein the spots are formed from the same capture solution i.e. formed from the same colloidal suspension in water (¶ 34). While the spots comprise different oligonucleotides and therefore do not consist of the same capture solutions, they are formed from the same solution as claimed.

Regarding Claims 5 and 6, Audeh et al disclose the biochip of Claims 1 and 2. While they do not teach the biochip spots are formed using an ink-jet system in which a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein a force of the discharge is controlled electronically, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because

Audeh et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claims 9 and 10, Audeh et al disclose the biochip of Claims 1 and 2. While they do not teach the biochip spots are formed using an ink-jet system in which a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein the number of times of discharge at each spot is controlled electronically, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Audeh et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

8. Claims 1, 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mirzabekov et al (U.S. Patent No. 6,458,584 B1, filed 3 March 1999) in view of Dean et al (U.S. Patent No. 5,843,662, filed 13 May 1996).

Regarding Claim 1, Mirzabekov et al teach a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with a specimen (i.e. hybridize) and provide information about a structure within the specimen (Column 9, lines 20-30) and wherein said plurality of said spots are formed in which the concentration of the capture material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity Column 18, lines 49-67) wherein the spots are supplied onto the base plate by means of an ink jet system i.e. peltier thermostated pin (Column 11, lines 45-48). Mirzabekov et al do not teach the spots have different spot sizes. However, Dean

et al teach that a linear relationship exists between spot concentration and spot size i.e. increasing nucleic acid concentration produces spots of increasing size (Column 2, lines 43-67 and Fig. 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made that the spots of Mirzabekov et al which have different concentrations would also have different spot sizes. Alternatively, it would have been obvious to one of ordinary skill in the art to apply the different spot size-to-concentration relationship taught by Dean et al (Fig. 1-5) to the Mirzabekov et al spots and to adjust the size of the spot to thereby provide the differing spot concentrations desired by Mirzabekov et al (Column 18, lines 49-62).

Regarding Claim 2, Mirzabekov et al teach the biochip wherein the spots are formed from the same capture solution i.e. formed from the same oligonucleotide synthesis solution (Column 11, lines 15-31 and Column 12, lines 8-10). While the spots comprise different oligonucleotides and therefore do not consist of the same capture solutions, they are formed from the same solution as claimed.

Regarding Claims 5 and 6, Mirzabekov et al teach the biochip of Claims 1 and 2 wherein the biochip spots are supplied using an ink-jet system i.e. peltier thermostated pin (Column 11, lines 45-48). They do not teach the supplying wherein a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein a force of the discharge is controlled electronically. However, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Mirzabekov et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claims 9 and 10, Mirzabekov et al teach the biochip of Claims 1 and 2 wherein the biochip spots are supplied using an ink-jet system i.e. peltier thermostated pin

(Column 11, lines 45-48). They do not teach the supplying wherein a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein a force of the discharge is controlled electronically. However, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Mirzabekov et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

9. Claims 1, 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chenchik et al (U.S. Patent No. 6,489,159 B1, filed 29 September 2000) in view of Dean et al (U.S. Patent No. 5,843,662, filed 13 May 1996).

Regarding Claim 1, Chenchik et al teach a biochip comprising a large number of spots of capture solutions containing a capture material therein arranged on a base plate wherein said plurality of capture solutions each of which is adapted to specifically react with a specimen (e.g. hybridize) and provide information about a structure within the specimen (Column 10, lines 17-24) and wherein said plurality of said spots are formed in which the concentration of the capture material varies from spot to spot and wherein each of said spots has a uniform detection sensitivity (Column 7, lines 49-64 and Claim 7). Chenchik et al do not teach the spots have different spot sizes. However, Dean et al teach that a linear relationship exists between spot concentration and spot size i.e. increasing nucleic acid concentration produces spots of increasing size (Column 2, lines 43-67 and Fig. 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made that the spots of Chenchik et al which have different concentrations would also have

different spot sizes. Alternatively, it would have been obvious to one of ordinary skill in the art to apply the different spot size-to-concentration relationship taught by Dean et al (Fig. 1-5) to the Chenchik et al spots and to adjust the size of the spot to thereby provide the differing spot concentrations desired by Chenchik et al (Claim 7).

Additionally, Chenchik et al do not teach the spots are supplied onto the base plate by means of an ink jet system. However, the courts have stated patentability is based on the product, not the process by which it is made. Therefore, the claimed biochip is unpatentable in view of the teaching of Chenchik et al. and Dean et al.

Regarding Claim 2, Chenchik et al teach the biochip wherein the spots are formed from the same capture solution i.e. total mRNA solution (Column 19, line 50-Column 20, line 29). While the spots comprise different oligonucleotides and therefore do not consist of the same capture solutions, they are formed from the same solution as claimed.

Regarding Claims 5 and 6, Chenchik et al teach the biochip of Claims 1 and 2. While they do not teach the biochip spots are formed using an ink-jet system in which a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein a force of the discharge is controlled electronically, the courts have stated patentability is based on the product, not the process by which it is made. Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Chenchik et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Regarding Claims 9 and 10, Chenchik et al teach the biochip of Claims 1 and 2. While they do not teach the biochip spots are formed using an ink-jet system in which a sample solution is impacted onto said base plate after being discharged into the atmosphere and wherein the number of times of discharge at each spot is controlled electronically, the courts have stated patentability is based on the product, not the process by which it is made.

Additionally, the courts have stated that claims drawn to an apparatus must be distinguished from the prior art in terms of structure see *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA1959). Because Chenchik et al disclose the claimed structural components of the biochip, they disclose the biochip as claimed.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,753,144. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to a biochip having spots of differing spot size or spot concentration. The claim sets merely differ in that the patent claims define the spotted material as "DNA" (a species) while the instant claims define the material as capture material (a genus).

The courts have stated that a genus is obvious in view of the teaching of a species see Slayter, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); and In re Gosteli, 872 F.2d

1008, 10 USPQ2d 1614 (Fed. Cir. 1989). Therefore the instantly claimed capture material is obvious in view of the patent DNA.

Conclusion

12. No claim is allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (571) 272-0741. The examiner can normally be reached on 6:00 TO 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on (571) 272-0735. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

BJ Forman, Ph.D.
Primary Examiner
Art Unit: 1634
May 9, 2006